ABSTRACT OF THE DISCLOSURE

A legged mobile robot possesses degrees of freedom which are provided at roll, pitch, and yaw axes at a trunk. By using these degrees of freedom which are provided at the trunk, the robot can smoothly get up from any fallen-down posture. In addition, by reducing the required torque and load on movable portions other than the trunk, and by spreading/averaging out the load between each of the movable portions, concentration of a load on a particular member is prevented from occurring. As a result, the robot is operated more reliably, and energy is used with greater efficiency during a getting-up operation. The invention makes it possible for the robot to independently, reliably, and smoothly get up from various fallen-down postures such as a lying-on-the-face posture, a lying-on-the-back posture, and a lying sideways posture.